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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CHANG, ERIC	

ART UNIT	PAPER NUMBER
2185	7

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/688,681	STINUS ET AL.	
	Examiner	Art Unit	
	Eric Chang	2185	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 October 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-26 are pending.

Specification

2. The abstract of the disclosure is objected to because of grammatical, clerical, or typographical mistakes. Examples of such errors are: "To programming" on line 1, "The the second" on line 7, and "excecuting" on line 13. Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities: "Background of the Invention" and "Summary of the Invention" should be separate sections.

Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

(e) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(f) BRIEF SUMMARY OF THE INVENTION.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The applicant or their representatives are urged to review the specification and submit corrections for all mistakes of a grammatical, clerical, or typographical nature. **For example,** "mainly corresponding" on line 11 of page 3, "the invention consists in a method" on line 22 of page 5, and "Prefered embodiments" on line 4 of page 6 require correction.

Claim Objections

5. Claims 11-12 are objected to because of the following informalities: the term "programm" as it appears in the claims should read, "program". Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. Claim 5 recites the limitation "second configuration process" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-7, 9-26 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent 6,275,931 to Narayanaswamy et al.

9. As to claim 1, Narayanaswamy discloses a method for programming a device with a memory running a process, the method comprising deactivating a first memory area by prohibiting the process from accessing said first memory area, and activating a second memory area by allowing the process to access said second memory area [col. 5, lines 22-31]. Narayanaswamy teaches a device with an active and an inactive memory area. After the upgrade process, the active area is deactivated, and the device uses the previously inactive memory area for running its processes thereafter.

10. As to claims 2 and 13-14, Narayanaswamy discloses running a configuration process to store data in the second memory for modifying the configuration data of the second memory [col. 3, lines 31-36]. Narayanaswamy teaches the boot code used to configure the device is written to the second memory area.

11. As to claim 3, Narayanaswamy discloses the configuration process is run from the first memory area [col. 3, lines 30-31]. Narayanaswamy teaches the program from the first memory area is used to operate the device; it is well known that such operations may include controlling the configuration upgrade process, substantially as claimed.

12. As to claim 4, Narayanaswamy discloses running a second configuration process to store data in a third memory area [col. 6, lines 54-67, and col. 7, lines 1-8]. Narayanaswamy teaches further upgrading the contents of a third memory area containing the main firmware.

13. As to claims 5 and 24, Narayanaswamy discloses allowing the configuration process access to the second memory space to modify its configuration data, and allowing general access to it thereafter [col. 3, lines 31-36]. Narayanaswamy teaches that the configuration process can write to the second memory area. After the reset, general access to the second memory area is available, because it would have become the active memory area [col. 3, lines 44-47].

14. As to claim 6, Narayanaswamy discloses storing the first device configuration in the second memory area [col. 8, lines 25-27]. Narayanaswamy teaches that the device configuration is stored to the second memory area, and that the configuration data is functionally equivalent to the data stored in the first memory area [col. 8, lines 15-21], substantially as claimed.

15. As to claims 7, 17-18, 23 and 25, Narayanaswamy discloses writing over a first branch address referencing the first memory area with a second branch address referencing the second memory area to activate the second memory area in a single write access [col. 3, lines 41-42]. Narayanaswamy teaches overwriting the vector table so that references to the configuration data would reference the second memory area instead of the first memory area, substantially as claimed. Narayanaswamy further teaches that the entire table is overwritten in a single step.

16. As to claim 9, Narayanaswamy discloses copying the first device configuration from a first memory area to the second memory area [col. 8, lines 1-4]. Narayanaswamy teaches copying configuration data from a source into the second memory area; it would be obvious to one of ordinary skill in the art that this source may be any other repository of the required information, such as a first memory area, substantially as claimed.

17. As to claim 10, Narayanaswamy discloses executing the first device configuration in the first memory area during the copying step [col. 3, lines 30-31]. Narayanaswamy teaches the program from the first memory area is used to operate the device; it is well known that such operations may include controlling the configuration upgrade process, substantially as claimed.

18. As to claims 11-12, 15-16 and 26, Narayanaswamy discloses a method for programming a device with a memory running a process, the method comprising deactivating a first memory area containing a device configuration by prohibiting the process from accessing said first memory area, and activating a second memory area by allowing the process to access said

second memory area [col. 5, lines 22-31]. Accordingly, Narayanaswamy also teaches that one of the memory areas is active and another of the memory areas is inactive, and that the active memory area is readable in order to execute the program contained therein. Because Narayanaswamy teaches the method, Narayanaswamy teaches an apparatus comprising a microprocessor and a memory circuit comprising a plurality of selectively activated memory area storing program implementing said method, substantially as claimed.

19. As to claims 19-21, Narayanaswamy discloses the memory circuit is a non-volatile memory such as an EEPROM [col. 4, lines 61-62]. Furthermore, it is well known in the art that power is needed to operate such a device, and that such power may come from an energy storage device, substantially as claimed.

20. As to claim 22, Narayanaswamy discloses a method for programming a device comprising:

[a] using an active first memory area storing a first programmable configuration, and having an inactive second memory area [col. 1, lines 57-67];

[b] configuring the second memory area with a modification of the programmable configuration [col. 3, lines 31-36]; and

[c] deactivating a first memory area storing a first programmable configuration, and activating a second memory area by allowing the process to access said second memory area [col. 5, lines 22-31].

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

22. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,275,931 to Narayanaswamy et al. in view of U.S. Patent 5,327,531 to Bealkowski et al.

23. As to claim 8, Narayanaswamy teaches all of the limitations of the claim, but does not teach that deactivating the first memory area upon the occurrence of a hardware or software failure in the first memory area and activating the second memory area thereafter.

Bealkowski teaches detecting an error state in a device caused by a corrupted first memory area, and switching to a second memory area in order to continue operating the device [col. 5, lines 4-22].

At the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the error detection means as taught by Bealkowski. One of ordinary skill in the art would have been motivated to do so to detect if the configuration data of a device is no longer suitable for usage.

It would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references because they are both directed to the problem of booting a device with a first and second memory area containing configuration data. Moreover, the error detection means

taught by Bealkowski would improve the robustness of Narayanaswamy because it allowed an alternate memory area to be used if the first memory area is corrupted or has failed.

Conclusion

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Chang whose telephone number is (703) 305-4612. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on (703) 305-9717. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

ec
August 9, 2003

THOMAS LEE
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